United States Environmental Protection Agency

OSWER/OSRTI
State, Tribal, and Site Identification Branch
Washington, DC 20460

NATIONAL PRIORITIES LIST (NPL)

****Proposed Site****

March 2008

NELSON TUNNEL/COMMODORE WASTE ROCK | **Creede, CO**
Mineral County

Site Location:

The Nelson Tunnel/Commodore Waste Rock site is located in the San Juan Mountains, part of the Rocky Mountain chain, in south central Colorado. The site lies approximately one mile upstream of the Town of Creede and four miles above the Rio Grande River

Site History:

The abandoned hard rock mine site consists of a draining adit that drains directly into West Willow Creek and a large unstable waste rock pile that has been breached in the past by flooding. West Willow Creek becomes Willow Creek and flows into the Rio Grande River approximately four miles from the site. Historically, mining of silver, lead, and zinc provided economic viability to the area in and around the Creede mining district. The activity resulted in contaminated water discharging into the Willow Creek drainage and mine waste piles accumulating in the watershed. Characterization of the watershed identified the Nelson Tunnel adit drainage as the largest source of cadmium, lead, and zinc in the Willow Creek watershed. Immediately upslope and surrounding the Nelson Tunnel is the Commodore Waste Rock pile, which is comprised of waste rock from hard rock mining that accumulated over the years. The waste rock contains elevated levels of arsenic, cadmium, lead, and zinc. In 2005, a less-than-20-year flood event caused catastrophic failure of the waste rock. The Commodore Waste Rock pile is now highly unstable and partially lies in West Willow Creek and Willow Creek.

Site Contamination/Contaminants:

The sources at the site are approximately five acres in size and consist of a draining adit and a large waste rock pile; both contain elevated levels of metals such as arsenic, cadmium, lead, and zinc. West Willow Creek runs through the site, carrying contamination into Willow Creek and the Rio Grande River approximately four miles downstream. A biological assessment of the Willow Creek watershed indicated concentrations for cadmium, lead, and zinc that exceed recommended dietary intake benchmarks and aquatic water standards for fish and birds.

Potential Impacts on Surrounding Community/Environment:

Since mining has moved out of the area, tourism and recreation have become the town's economic backbone. Fishing is an important part of recreation for visitors and locals. Fisheries have been impacted to the point that no fish exist for approximately a two mile stretch below the site. Farther below that, the fish are sparse and appear to be suffering from reproductive effects from metal contamination. Willow Creek is a tributary of the Rio Grande River, a state designated Gold Medal fishery. If a greater-than-20-year-flood event were to occur, it could flood over the banks bringing contamination into the Town of Creede and potentially resulting in fish kills further downstream.

Response Activities (to date):

There have been no response actions to date.

Need for NPL Listing:

For the past eight years, much of the watershed has been addressed using other cleanup authorities. The community, state, and EPA have jointly determined that Superfund is the only option to address this source of contamination. The town of Creede has sent a letter to the Governor supporting listing. .

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDR or 1-888-422-8737.